CLAIMS

1. A surface protective film for protecting the surface of a substrate, which comprises a polyester film (A) and an adhesive layer (B) formed on one of the surfaces of the polyester film (A) and has a critical bounce coefficient of not more than 0.5.

2. The surface protective film of claim 1, wherein the adhesive layer (B) satisfies all of the following conditions.

(1) The dry adhesion against a stainless steel plate is 30 to 500 mN/25 mm.

(2) The rate of change in the dry adhesion after kept stuck at 60°C for a week is 0.5 to 2.0 times.

(3) The size of a ball used in ball tack measurement is 2/32 to 10/32 inches.

(4) The thickness of the adhesive layer (B) is 3 to 50 μm.

3. The surface protective film of claim 1, wherein when the adhesive layer (B) and a stainless steel plate are stuck so that the area of the portion to which the adhesive layer (B) contacts the stainless steel plate may be 20 mm × 20 mm and 1kg load is applied in the direction along the stuck surface at 80 ℃ for 1 hour, the movement of the adhesive layer (B) from the stainless steel plate is 0 to 1 mm.

4. The surface protective film of claim 1, wherein when the adhesive layer (B) has been stuck on the stainless steel plate at 80 ℃ for week and then peeled off, the adhesive residues of 1 mm^2 or larger in an area of 100 cm^2 on the surface of a stainless steel plate is 0.

5. The surface protective film of claim 1, wherein the adhesive layer (B) has a center line average surface roughness (Ra) of 2 to 500 nm.

6. The surface protective film of claim 1, wherein the adhesive layer has a glass transition temperature of -60 to -20 ℃, a modulus in tension of 0.1 to 0.2 MPa and a surface

tension of 15 to 25 μN/cm.

7. The surface protective film of claim 1, which further has a protective layer (C), which contains at least one agent selected from the group consisting of an antistatic agent and a release agent, formed on the surface of the polyester film (A) by the side of opposite with the surface in which the adhesion layer (B) has formed.

8. The surface protective film of claim 7, wherein the peel force of the protective layer (C) against the adhesive layer (B) is 10 to 1,000 mN/25 mm.

9. The surface protective film of claim 1, wherein the polyester film (A) is a monoaxially or biaxially oriented film.

10. The surface protective film of claim 9, wherein the difference (N_{TD}-N_{MD}) between the refractive index in the transverse direction (N_{TD}) and the refractive index in the machine direction (N_{MD}) of the biaxially oriented polyester film (A) is larger than -0.08 and smaller than 0.08.

11. The surface protective film of claim 9, wherein the difference (N_{TD}-N_{MD}) between the refractive index in the transverse direction (N_{TD}) and the refractive index in the machine direction (N_{MD}) of the polyester film (A) is 0.08 or larger.

12. The surface protective film of claim 1, wherein the polyester film (A) has a center line average surface roughness (Ra) of 2 to 500 nm and has no particles of 25 μm or larger and 10 or less particles of not smaller than 5 μm and smaller than 25 μm in an area with a length of 148mm of the neighborhood which intersects perpendicularly with a length of 210mm of one side (310.8 cm^2).

13. The surface protective film of claim 1, which has a visible light transmittance of not lower than 70%.

14. The surface protective film of claim 1, which has a haze of not higher than 10%.

15. The surface protective film of claim 1, wherein the adhesive layer (B) has a release film (D) comprising a biaxially oriented polyester film on its surface by the side of opposite of the surface where the adhesion layer (B) has been contact with the polyester film (A).

16. The surface protective film of claim 14, wherein the release film (D) has a center line average surface roughness (Ra) of 2 to 500 nm and has no particles of 25 μm or larger and 10 or less particles of not smaller than 5 μm and smaller than 25 μm in an area with a length of 148mm of the neighborhood which intersects perpendicularly with a length of 210mm of one side (310.8 cm^2).

17. The surface protective film of claim 14, wherein a release layer comprising at least one release agent selected from the group consisting of a silicone resin, a fluorine resin and aliphatic wax, formed on the surface where the release film (D) has been contact with the adhesion layer (B).

18. A film roll having the form of the roll which the surface protective film according to claim 1 is rolled round with the adhesive layer (B) contacting directly the protective layer (C).

19. Use of the surface protective film of any one of claim 1, 7 or 15 for protecting the surface of at least one substrate selected from the group consisting of a polarizer, a diffusing plate, a translucent reflector, an optical retardation film and a viewing angle-widening film.

20. Use of the film roll of claim 18 for protecting the surface of at least one substrate selected from the group consisting of a polarizer, a diffusing plate, a translucent reflector, an optical retardation film and a viewing angle-widening film.